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Motivating deference: Employees' perception of authority legitimacy as a mediator of supervisor motivating styles and employee work-related outcomes

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ABSTRACT

The two studies presented here examine the extent to which perceived authority legitimacy mediates the association between supervisors' motivating styles and subordinates' work-related outcomes. From the perspective of the self-determination theory (SDT), we examined two supervisory motivating styles: the autonomy-supportive style that nurtures employees' inner motivational resources and the controlling style in which supervisors pressure their employees to behave in specific manager-directed ways. Perceived authority legitimacy was defined according to the Relational Model of Authority (RMA). The results of Study 1 ($n = 191$) showed that the autonomy-supportive motivating style, but not the controlling style, was associated with employees' work satisfaction, commitment, and burnout through legitimacy. These results were replicated in Study 2 ($n = 314$), even after controlling for task-autonomous and controlled motivation, and extended to other reported employee behavioral outcomes such as organizational citizenship behavior, deviant behavior, and conflicts within the workplace. Taken together, the results suggest that the effectiveness of the autonomy-supportive motivating style is partly due to its association with volitional deference to authority. The paper concludes by discussing theoretical implications of integrating SDT with RMA and the practical implications of the findings.

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1. Introduction

The managerial effort to enhance and maintain employee motivation constitutes one of the most complex and challenging parts of a manager's job because of its potential impact in terms of both productivity and workplace climate (Deci, Connell, & Ryan, 1989; Kouzes & Posner, 2002). Numerous researchers have argued that good management hinges on the degree of motivation managers can elicit from employees (Bono & Judge, 2003; Frey & Osterloh, 2002; Vroom & Deci, 1992). While there is little question that motivating employees is critical for successful organizational functioning (i.e., obtaining positive work-related outcomes), the strategies supervisors should use to achieve this objective are more debatable (Cerasoli, Nicklin, & Ford, 2014). Recent research,

grounded in the self-determination theory (SDT; Deci & Ryan, 2000) framework, differentiates between two strategies or motivating styles: an *autonomy-supportive* style and a *controlling* style (Bartholomew, Ntoumanis, Ryan, Bosch, & Thøgersen-Ntoumani, 2011; Cheval, Chalabaev, Quested, Courvoisier, & Sarrazin, 2017; Eyal & Roth, 2011; Jang, Kim, & Reeve, 2016; Patall et al., 2017). The autonomy-supportive motivating style involves nurturing employees' internal resources such as on-the-job interests, perceived competence, and a sense of the value of their work (Kanat-Maymon & Reizer, 2017; Moreau & Mageau, 2012). By contrast, the controlling style involves the exercise of authority using external factors such as incentives; sanctions; surveillance; and pressure to think, feel, or behave in specified ways (Gagné & Deci, 2005; Hardré & Reeve, 2009).

An accumulating body of research has repeatedly shown that the autonomy-supportive style is more beneficial than the controlling style in enhancing employees' work attitudes and behaviors. Autonomy support has been associated with better performance (Baard, Deci, & Ryan, 2004; Kanat-Maymon & Reizer,

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2017), higher quality motivation (Gillet, Gagné, Sauvagère, & Fouquereau, 2013; Roth, Assor, Kanat-Maymon, & Kaplan, 2007), greater job satisfaction (Deci et al., 2001; Deci et al., 1989), higher engagement (Deci et al., 2001), more organizational citizenship behaviors (Güntert, 2015), better acceptance of organizational change (Gagné et al., 2010), and psychological health (Baard et al., 2004; Moreau & Mageau, 2012). Meanwhile, the controlling supervisory style has been associated with more depression, negative affect, and burnout (Bartholomew et al., 2011; Eyal & Roth, 2011). A controlling working environment even predicts higher rates of fraud (Kanat-Maymon, Benjamin, Stavsky, Shoshani, & Roth, 2015).

In what follows, we build on and extend SDT research and argue that the effectiveness of the autonomy-supportive style may, in part, be accounted for by the concept of legitimacy. Legitimacy represents the internalization of the authority figure's power and has been defined as the belief that the authority or supervisor has a right to be obeyed (French & Raven, 1959; Tyler, 2006).

According to the relational model of authority (RMA; Tyler & Lind, 1992), legitimacy is a relational process; hence, when authorities treat people with dignity and respect, such persons tend to internalize the authorities' power and voluntarily comply with their decisions (Rhoades & Eisenberger, 2002; Tyler & Lind, 1992; Tyler, 2006; Van der Toorn, Tyler, & Jost, 2011). In other words, supervisors who motivate using an autonomy-supportive style communicate to their employees that they are valued and respected (Deci, Olafsen, & Ryan, 2017). This management style will foster the supervisor's legitimacy, thus inspiring deference to his or her decisions, and leading to positive employee outcomes.

The two studies presented here explored the ways in which legitimacy may play a central role in the relationship between SDT-based motivating styles and important employee outcomes such as job satisfaction, commitment, organizational citizenship behavior, burnout, deviant behaviors, and workplace conflicts. The work contributes to the field of management by integrating SDT (Deci & Ryan, 2000) with the RMA approach to legitimacy (Tyler, 2006) to examine why the SDT autonomy-supportive motivating style is more effective. A better understanding of *why* sheds light on the mechanism by which an autonomy-supportive motivating style may be associated with high levels of employee work-related outcomes. If autonomy support promotes supervisor legitimacy, employees may be more willing to engage in organizational activities because they accept the obligation to obey. The internalized obligation may, in turn, point to an additional motivating source that cannot be attributed to the characteristics of the task itself, such as the interest it elicits or the challenges it poses. This can be practical in cases where tasks are uninteresting or unchallenging. Fig. 1 illustrates the hypothesized model.

The work also contributes to the research on legitimacy and organizational justice. To date, most of the literature on legitimacy in work settings has addressed the effects of organizational justice on perceived legitimacy and behavioral compliance (Tyler & Lind, 1992; Tyler, 2006). This body of research has shown that higher levels of perceived procedural and distributional justice are associated with greater perceived authority and organizational legitimacy (Sunshine & Tyler, 2003; Tyler, 2006). SDT motivating styles may be an additional way to promote legitimacy. Motivating styles can be addressed in training courses and organizational interventions (Assor, Feinberg, Kanat-Maymon, & Kaplan, 2018; Hardré & Reeve, 2009), with important practical implications.

2. Theoretical background

2.1. Self-determination theory of motivation

SDT is an approach to human motivation that associates motivational processes with performance and wellness and explores workplace conditions (e.g., managerial styles, pay contingencies) that facilitate or undermine high-quality and sustainable motivation (Deci & Ryan, 1985; Ryan & Deci, 2000). SDT has been successfully applied across many domains including parenting, education, healthcare, and sports, as well as the fields of work motivation and management (Deci et al., 2017; Ryan & Deci, 2000). Unlike other traditional approaches that treat motivation as a unitary concept, SDT posits that employees' performance and well-being are affected by the type of motivation they have for their job activities. Types of motivation are differentiated into two broad categories: autonomous and controlled (Deci & Ryan, 2000; Roth, Assor, Kanat-Maymon, & Kaplan, 2006).

Autonomous motivation is characterized by engagement in an activity with a full sense of volition and the experience of choice (Deci et al., 2017). Specifically, autonomous motivation comprises *intrinsic motivation*, in which the regulation of actions is incited by the inherent satisfaction, interest, or enjoyment that a task brings with it, and *identified regulation*, which involves identifying with the value or utility of an activity. By contrast, controlled motivation represents a form of being "forced" to act by forces outside or inside the person (Ryan & Deci, 2000). To be precise, controlled motivation consists of *external regulation*, in which a person's behavior is a function of external contingencies of reward or punishment, and *introjected regulation*, in which action is driven by internal controlling consequences such as feelings of guilt, shame, or pride (Gagné & Deci, 2005; Kanat-Maymon, Roth, Assor, & Reizer, 2016).

According to SDT, these regulations lie along an autonomy continuum, with external regulation the least autonomous,

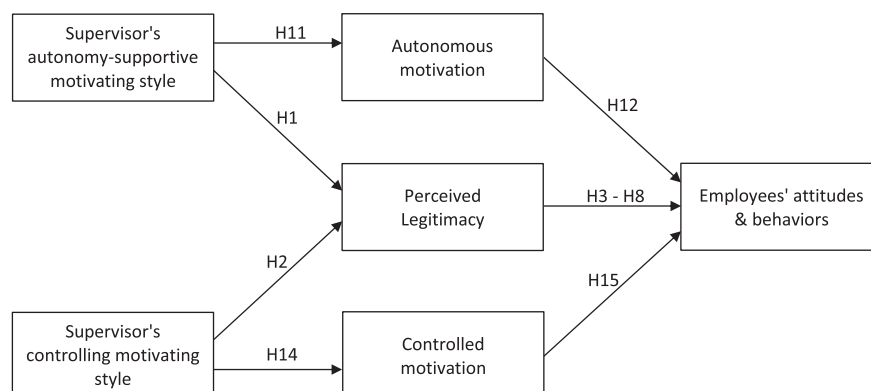


Fig. 1. The hypothesized model.

followed by introjected regulation (i.e., somewhat autonomous), with identified regulation (i.e., highly autonomous), and intrinsic motivation (i.e., the most autonomous) located at the upper end. Regulations located at the lower part of the continuum are not assimilated or only slightly assimilated in the self; therefore, behavior is perceived as controlled, driven by forces alienated from the self. By contrast, regulations located at the higher end of the continuum are well assimilated and integrated in the self; thus, behavior is experienced as volitional or self-determined (Roth et al., 2006).

Autonomous forms of motivation are particularly desirable in the workplace because, as research routinely indicates, they are associated with a variety of desirable and adaptive outcomes including work satisfaction (e.g., Millette & Gagné, 2008; Richer, Blanchard, & Vallerand, 2002), work engagement (e.g., van Beek, Taris, & Schaufeli, 2011), performance (e.g., Cerasoli et al., 2014), and organizational commitment (e.g., Gagné et al., 2010). By contrast, controlled motivation is generally associated with maladaptive work outcomes because the pressure to think, feel, or behave in particular ways causes the pursuit of goals to be less aligned with a person's own values and interests. Controlled motivation has been associated with employees' turnover intentions (e.g., Gillet, Gagné, et al., 2013), psychological distress (e.g., Gagné et al., 2010), burnout (e.g., Eyal & Roth, 2011; van Beek et al., 2011), and anxiety (e.g., Cox, Ullrich-French, Madonia, & Witty, 2011; Magnus, Kowalski, & McHugh, 2010).

According to SDT, intrinsic motivation and internalization/integration are natural processes that must be nourished (Deci & Ryan, 2000). For them to function optimally, three basic psychological needs must be met: competence (i.e., feeling effective in one's actions), relatedness (i.e., feeling connected with others and a sense of belonging), and autonomy (i.e., self-organization and endorsement of one's behavior) (Gagné & Deci, 2005). When people find their needs for relatedness and competence to be supported and satisfied with respect to a behavior, they will tend to internalize a regulation or value related to that behavior. However, this alone is insufficient to foster full integration, and the regulation will end up, at most, being introjected. For a fuller identification and intrinsic motivation to occur, autonomy support is essential (Deci, Eghrari, Patrick, & Leone, 1994; Grolnick & Ryan, 1989; Williams, Grow, Freedman, Ryan, & Deci, 1996).

Fundamental to SDT is the idea that workplace social factors such as managerial style impact satisfaction of relatedness, competence, and autonomy needs and consequently shape workers' motivations (Deci et al., 2017). Recently, researchers have suggested adopting a differentiated view of the managerial styles and their distinct motivational effects (Jang et al., 2016; Patall et al., 2017). This view has been labeled as the dual-process model; accordingly, employees' autonomous motivation is a consequence of a managerial style oriented toward autonomy support, whereas employees' controlled motivation emerges as a result of autonomy frustration.

Managers who have an autonomy-supportive motivating style nurture their employees' autonomous motivation by understanding and acknowledging their subordinates' perspective, allowing choice when possible, providing a meaningful rationale when choice is constrained, encouraging self-initiation, and minimizing pressure (Deci et al., 1994; Gagné & Deci, 2005; Moreau & Mageau, 2012). By contrast, managers who thwart or suppress autonomy are said to have a controlling motivating style, pressuring employees to behave in a specific and directed way (Deci & Ryan, 1985; Reeve, 2009). Examples of a controlling style include threats of punishment, neglecting to provide explanatory rationales, relying on pressuring language (e.g., "have to"), displays of impatience with employees' ways of doing things, and reacting to employees'

complaints and expressions of negative affect with authoritarian statements.

SDT researchers have consistently found that supervisors' support of autonomy satisfies the three basic psychological needs and consequently fosters autonomous motivation (Deci et al., 2017; Gagné & Deci, 2005). However, in line with the dual-process model, autonomy support is less likely to relate strongly to need frustration and controlled motivation because low autonomy support does not adequately tap the full intensity of being controlled. For instance, a supervisor who does not actively encourage employees to voice opinions (i.e., low autonomy) may not have the same effect as a supervisor who actively disregards employees' suggestions (i.e., high control). Therefore, the controlling motivating style is far more likely to lead to need frustration and controlled motivation (Bartholomew et al., 2011; Jang et al., 2016; Patall et al., 2017). Some empirical evidence supports this view and suggests that autonomy support in the workplace has a more strong association with autonomous motivation (Baard et al., 2004; Liu, Chen, & Yao, 2011; Otis & Pelletier, 2005), whereas controlling behaviors are mostly associated with controlled motivation (Deci et al., 2017; Fernet, Guay, Senécal, & Austin, 2012).

2.2. Perceived legitimacy

Legitimacy is a characteristic of an authority or an institution that makes people accept or believe this authority/institution deserves to be obeyed (Tyler, 1990, 2006). It represents an internalization and acknowledgement of a power structure (Tyler, 1997). In the words of French and Raven, legitimacy is "the power which stems from internalized values ... which dictates that [an authority] has a legitimate right to influence [a person] and that [the person] has an obligation to accept this influence" (1959, p. 159). Thus, legitimacy extends beyond the instrumental power of authority figures over others. Instead, it should be seen as an additional form of power that lets an authority figure shape other people's behavior by the right of that figure to be deferred to (Beetham, 1991; Ford & Johnson, 1998).

The RMA (Tyler & Lind, 1992) considers legitimacy to be socially constructed through implicit and explicit interactions between subordinates and supervisors. It argues that relational features such as a supervisor's trustworthiness (i.e., the authority is perceived to acknowledge and care for the individual's interests and needs), interpersonal respect (i.e., the authority treats people with respect and dignity), and neutrality (i.e., the authority is perceived to be impartial and objective) are important determinants of legitimacy because they communicate the extent to which the subordinate is valued by the authority (Tyler, 1997). That is, an employee's perception of being cared for by a supervisor informs him/her about his or her value and status in the organization. Following the pre-suppositions of the social identity theory (Tajfel & Turner, 1986), employees use the information they acquire about their status in the group to construct their social and professional identity (Tyler & Blader, 2003). Because individuals are motivated to maintain or enhance their self-esteem, they tend to identify with groups that affirm their value and informal standing (Tyler, 1997). Employees with strong organizational identity come to see their membership in an organization as integrated with their self-concept such that the group and the self become overlapping psychological entities (Ashforth, Harrison, & Corley, 2008; Pratt, 1998; Tyler, 1997). Such persons internalize the organization's values and norms and show deference to its rules and to those enforcing the rules (the supervisor/authority). Thus, organizational rules and procedures once external to the self now become part of an internalized motivation system and guide behavior from within, even in the absence of external contingencies (Blader & Tyler, 2009; Tyler & Blader, 2003).

The RMA approach has primarily been supported by research on organizational justice (Tyler, 2006), which shows that procedural justice communicates relational information and is therefore an antecedent of legitimacy (for a review, see Tyler, 2006).

3. Hypotheses development

3.1. Supervisor's motivating styles and legitimacy

The autonomy-supportive motivating style is an interpersonal approach in which supervisors try to provide employees with options and choice and to give a meaningful rationale in those cases where choice is constrained (Deci et al., 1994). They also try to consider their subordinates' perspectives, for instance, by soliciting their opinions about their performance or by asking how instructions were received. We argue that when supervisors adopt an autonomy-supportive motivating style, they communicate trustworthiness, respect, and neutrality, thereby fostering subordinates' perception of the legitimacy of their authority.

Research has shown that when organizational demands are communicated in an autonomy-supportive way, employees have more trust in the supervisor (Deci et al., 1989), perceive the supervisor as more respecting (Gagné et al., 2010), and impartial (Gillet, Colombat, Michinov, Pronost, & Fouquereau, 2013). However, when demands are communicated in a controlling way, employees are less likely to perceive the authority as legitimate. For instance, the frequent use of controlling language or the threat of punishment may indicate a lack of trust. Further, ignoring employees' opinions, restricting their choice, and denying them a voice will signal that they are not highly valued (van Prooijen, 2009). In short, a controlling motivating style is less likely to signal that the employee is esteemed and appreciated, hence undermining the perceived legitimacy of authority.

Little research has examined the relationship between autonomy support/control and legitimacy, and none has been conducted in the realm of work organizations. Graça, Calheiros, and Barata (2013) found that the perceived autonomy support of teachers showed a positive association with students' ratings of teacher legitimacy. Similarly, among athletes, a composite measure of coaches' perceived autonomy-supportive minus controlling communication style was associated with the athletes' perception of the coaches' legitimacy (Mouratidis, Lens, & Vansteenkiste, 2010). Based on the above theories and findings, we hypothesized the following:

Hypothesis 1. A perceived supervisor autonomy-supportive motivating style will have a positive association with perceived legitimacy.

Hypothesis 2. A perceived supervisor controlling motivating style will have a negative association with perceived legitimacy.

3.2. Perceived legitimacy and work-related outcomes

Perceived supervisor legitimacy is critical for organizations to function effectively because organizations rely on their employees to follow organizational procedures and rules. Without voluntary adherence, organizations would require enormous amounts of resources to create a reliable system of surveillance to punish rule breakers and provide incentives for desired behavior. Moreover, governing based on power alone leaves an organization vulnerable to disruption of resources and may breed contempt among subordinates (Tyler & Blader, 2005).

Because legitimacy is fundamental to organizational effectiveness, we expected perceived legitimacy to affect a range of

workplace outcomes. Specifically, we examined six theoretically and practically relevant workplace attitudes and behaviors representing both desired and undesired outcomes. Adaptive or desired ones included work satisfaction, commitment, and organizational citizenship behaviors, while maladaptive or undesired ones were burnout, deviant behaviors, and workplace conflicts. Previous research has shown that these are relevant for organizational performance (Dunlop & Lee, 2004; Halbesleben & Bowler, 2007; Judge, Thoresen, Bono, & Patton, 2001; Meyer, Paunonen, Gellatly, Goffin, & Jackson, 1989; Podsakoff & MacKenzie, 1997; Sonnentag, Unger, & Nägel, 2013).

The first outcome variable, work satisfaction, refers to an employee's overall sense of well-being at work. It is an attitude based on assessing job and job-related experiences with some degree of favor or disfavor (Locke, 1976). Research has shown that perceiving behavior as flowing from internal values about what one ought to do, such as in the case of legitimacy, can shape satisfaction (Tyler & Huo, 2002; Tyler, 1997). For instance, Kim (2000) found that perceived legitimacy predicted job satisfaction, and Hinds and Murphy (2007) found that public perception of police legitimacy was associated with satisfaction with the police. Therefore, we hypothesized the following:

Hypothesis 3. Perceived supervisor legitimacy will have a positive association with work satisfaction.

Affective organizational commitment refers to emotional attachment to and involvement in the organization (Allen & Meyer, 1990). Employees who accept their supervisors' and the organization's authority are more apt to be committed to the workplace and develop an emotional attachment to it (Halaby, 1986). Yoon and Thye (2011) showed legitimacy was associated with employees' affective commitment, and, in a longitudinal study of organizational change, Morin et al. (2016) reported that employees' initial beliefs about the legitimacy of organizational change predicted their later affective commitment to change. Thus, we hypothesized:

Hypothesis 4. Perceived supervisor legitimacy will have a positive association with affective commitment.

Organizational citizenship behaviors (OCB) represent employees' extra efforts to achieve an organization's goals (Organ, 1988). Research indicates that when employees perceive the authority as legitimate, they engage in voluntary actions motivated by the desire to help their group be viable and effective (Tyler & Blader, 2000). Although they did not directly examine supervisor legitimacy in association with OCB, Van Dijke, De Cremer, and Mayer (2010) found that perceived supervisor trust, a key indicator of legitimacy (Tyler & Lind, 1992), was associated with OCB. Based on this indirect association, we hypothesized that:

Hypothesis 5. Perceived supervisor legitimacy will have a positive association with organizational citizenship behaviors.

Burnout is considered a prominent indicator of poor employee functioning (Maslach, Schaufeli, & Leiter, 2001). Although there are different definitions of burnout (Malach-Pines, 2005; Maslach et al., 2001; Schaufeli & Enzmann, 1998), exhaustion is perhaps the central, dominant, and most significant component (e.g., Evans & Fischer, 1993; Richardsen & Burke, 1993; Wright & Bonett, 1997). Semmer, Tschan, Meier, Facchin, and Jacobshagen (2010) suggested that the perception of demands as illegitimate is a unique source of stress because it involves behaviors that both violate what an employee believes is proper and jeopardize professional identity and social standing. If experienced frequently, illegitimacy may create enduring symptoms of strain, such as burnout (Semmer et al., 2015). Hence, we hypothesized that:

Hypothesis 6. Perceived supervisor legitimacy will have a negative association with burnout.

Workplace deviant behavior (WDB) has attracted much research attention in recent years because of its extremely harmful consequences to organizations and employees (Bowling & Gruys, 2010; Dunlop & Lee, 2004; Robinson & Greenberg, 1998). WDB includes such behaviors as stealing, sabotaging the company's property, withdrawal, or publicly embarrassing a supervisor (Bennett & Robinson, 2000). Sanches, Gouveia-Pereira, and Carugati (2012) applied the RMA approach to explain adolescent deviant behavior. They hypothesized and found that due to the identification qualities of legitimacy, the evaluation of institutional authorities as legitimate had a negative association with deviant behavior. Similarly, Reisig and Bain (2016) found that legitimacy had an inverse association with academic dishonesty. Hence, we hypothesized that:

Hypothesis 7. Perceived supervisor legitimacy will have a negative association with workplace deviant behavior.

Interpersonal conflict at work is considered a leading source of stress and interference with goal attainment (e.g., Bruk-Lee, Nixon, & Spector, 2013). According to the power restoration theory (Cropanzano & Baron, 1991), mistreatment by authority may jeopardize an employee's status, making conflict a means to restore lost power. Legitimacy, however, encourages a favorable perception of decisions made by the authority (Mueller & Landsman, 2004; Tyler & Huo, 2002), buffering the negative consequences of authority mistreatment. For instance, Johnson, Kaufman, and Ford (2000) found that when a supervisor was highly legitimate, subordinates reported feeling less resentful, even in response to adverse decisions. Similarly, Nelson, Shechter, and Ben-Ari (2014) found that students' perceptions of teachers' legitimacy was associated with a less dominating conflict resolution style. Therefore, we hypothesized:

Hypothesis 8. Perceived supervisor legitimacy will have a negative association with workplace conflicts.

3.3. Mediation model

Integrating the hypothesized associations between supervisors' motivating styles and legitimacy (Hypotheses 1–2) with the hypothesized organizational outcomes of perceived legitimacy (Hypotheses 3–8) suggests that perceived legitimacy may mediate the association between supervisors' motivating styles and their subordinates' work-related outcomes. This notion is in line with the *social identity mediation hypothesis* put forward by Tyler and Blader (2003). The hypothesis contends that identity evaluations such as those involved in legitimacy (Tyler, 1997) can mediate the relationship between organizational treatment and employees' attitudes, values, and cooperative behaviors. Although it has not been examined in the workplace, coaches' perceived legitimacy was found to mediate the effect of perceived autonomy-supportive coaching on athlete functioning (Mouratidis et al., 2010).

Further, we assert that legitimacy captures a unique aspect of voluntary compliance not captured by autonomous motivation and, therefore, can serve as an additional mediating mechanism between the social-context climate and outcomes. In SDT, autonomous motivation is mostly oriented toward the characteristics of a task or activity. For instance, popular measures of autonomous work motivation focus on the extent to which a task is interesting or important to an individual's life goals (Gagné et al., 2010). A similar approach is found in measures of autonomous motivation toward academic learning (Roth et al., 2006), exercising (Ryan &

Connell, 1989), and health behaviors (Williams et al., 1996). As mentioned, however, legitimacy involves an internalization of power and the acceptance of control exercised by an authority figure (Tyler, 2006). As such, perceived legitimacy is more a characteristic of the authority who commands the task than of the task itself. Moreover, from an experiential perspective, autonomous motivation emphasizes the desire to act based on enjoying and/or valuing the behavior, whereas legitimacy focuses on acceptance of obedience. Thus, for example, employees may be more willing to carry out a task such as working overtime when commanded by a legitimate supervisor than by an illegitimate one. This deference is not attributable to the characteristics of the task but to the legitimacy of the authority. Therefore, we hypothesized the following:

Hypothesis 9. Perceived supervisor legitimacy will mediate the relationship between perceived supervisor autonomy support and the outcome variables of work satisfaction (H9a), commitment (H9b), OCB (H9c), burnout (H9d), deviant behavior (H9e), and workplace conflicts (H9f).

Hypothesis 10. Perceived supervisor legitimacy will mediate the relationship between perceived supervisor control and the outcome variables of work satisfaction (H10a), commitment (H10b), OCB (H10c), burnout (H10d), deviant behavior (H10e), and workplace conflicts (H10f).

Finally, SDT explains that employees' workplace attitudes and behaviors are a function of the type of employee motivation. Positive attitudes and desirable behaviors are attributed to more autonomous forms of motivation (Cerasoli et al., 2014; Eyal & Roth, 2011; Gagné et al., 2010; Gillet, Gagné, et al., 2013; Millette & Gagné, 2008; Richer et al., 2002; van Beek et al., 2011). SDT further asserts that the type of motivation is a result of workplace contextual factors such as the supervisor's motivating style (Baard et al., 2004; Deci et al., 1994; Fernet et al., 2012; Nie, Chua, Yeung, Ryan, & Chan, 2015; Otis & Pelletier, 2005; Williams et al., 1996). Together, this is known as the SDT motivation mediation model (Deci et al., 2017).

As mentioned, to better explain optimal and nonoptimal functioning, some researchers have suggested differentiating supervisors' motivating styles and subordinates' motivations into distinct processes of autonomy and control (Jang et al., 2016; Patall et al., 2017). Accordingly, Hypotheses 11 through 13 describe the "brighter" side of the motivation mediation model (i.e., autonomous motivation), starting with the perceived autonomy-supportive motivating style and turning to the desirable workplace attitudes and behaviors that follow. Hypotheses 14 through 16 describe the "darker" side of employee motivations (i.e., controlled motivation), the controlling motivating style that precedes it, and its negative effects on workplace outcomes.

Hypothesis 11. A perceived supervisor autonomy-supportive motivating style will have a positive association with autonomous motivation.

Hypothesis 12. Autonomous motivation will have a positive association with work satisfaction (H12a), commitment (H12b), and OCB (H12c) and a negative association with burnout (H12d), deviant behavior (H12e), and workplace conflicts (H12f).

Hypothesis 13. A perceived supervisor autonomy-supportive motivating style will be indirectly associated with work satisfaction (H13a), commitment (H13b), OCB (H13c), burnout (H13d), deviant behavior (H13e), and workplace conflicts (H13f) through autonomous motivation.

Hypothesis 14. A perceived supervisor controlling motivating style will have a positive association with controlled motivation.

Hypothesis 15. Controlled motivation will have a negative association with work satisfaction (H15a), commitment (H15b), and OCB (H15c) and a positive association with burnout (H15d), deviant behavior (H15e), and workplace conflicts (H15f).

Hypothesis 16. A perceived supervisor controlling motivating style will be indirectly associated with work satisfaction (H16a), commitment (H16b), OCB (H16c), burnout (H16d), deviant behavior (H16e), and workplace conflicts (H16) through controlled motivation.

We tested our predictions, as presented in Fig. 1, in two studies. Study 1 utilized a cross-sectional design and examined the extent to which legitimacy mediated the effects of perceived supervisor motivating styles on employees' work attitudes of satisfaction and affective commitment and on symptoms of burnout. Study 2 was designed to replicate and extend the previous study in two ways. First, as we reasoned that legitimacy captures a unique facet of acceptance not covered by the SDT notion of task motivation, we introduced autonomous and controlled motivations as parallel mediators to account for covariances in the examination of the mediational role of legitimacy. Second, we extended the dependent measures to include behavioral aspects of employees' optimal and poor functioning: organizational citizenship behavior, deviant behavior, and workplace conflicts. We reasoned that this approach, notably its inclusion of desired and maladaptive outcomes, as well as employees' attitudes and behaviors, might shed light on the mediational role of legitimacy in various employee work-related outcomes.

4. Study 1

4.1. Method

4.1.1. Participants and procedure

A convenience sample of 192 workers from various Israeli companies volunteered to participate in the study. Participants were recruited with the aid of five M.A. students who participated in a research seminar on motivation. The research students recruited participants through ads posted in social networks (i.e., Facebook, WhatsApp, etc.). Data were collected using an online survey platform (Qualtrics). To reduce response distortion (Chan, 2009, pp. 309–336), the participants were informed that their responses would be treated confidentially.

The participants worked in a wide variety of industries (4% in energy, 16% in basic materials, 15% in consumer products, 6% in health, 17% in consumer services, 11% in finance, 8% in infrastructure, and 23% in technology) and occupational categories (e.g., administrators, technicians, salespersons, manual workers, clerical workers, management, nurses, call-center representatives, waiters, and teachers). The average age of the participants was 31.1 years (range = 20–76 years, $SD = 9.46$). Of the participants, 71% were women, 36% were married, and 68% had a college degree or higher. The average organizational tenure was 5.50 years (range = 1–43 years, $SD = 7.45$).

4.1.2. Measurements

4.1.2.1. Perceived supervisor motivating styles. The participants' perceptions of their supervisors' motivating styles were measured on the Perceived Autonomy Support Scale for employees (PASS-E; Moreau & Mageau, 2012). This scale is made up of 21 items and is rated on a 5-point Likert-type scale ranging from 1 (*I do not agree at all*) to 5 (*I strongly agree*). The autonomy-supportive style is measured on 9 items that examine the provision of choices (e.g., "Within certain limits, my supervisor gives me the freedom to choose how and when I will execute my tasks"), provision of a

rationale for rules (e.g., "When my supervisor asks me to do something, he/she explains why he/she wants me to do it"), and inquiries about acknowledgement of consideration (e.g., "My supervisor takes the time to listen to my opinion and my point of view when I disagree with him/her"). The supervisor controlling style is measured on 12 items that have to do with receiving orders (e.g., "My supervisor does not take the time to ask me to do something; he/she orders me to do it"), inducing guilt (e.g., "My supervisor tries to motivate me by making me feel guilty for not doing enough"), using threats (e.g., "At times, my supervisor intimidates or black-mails me in order to make me do certain tasks"), and manipulating others by offering rewards (e.g., "When my supervisor offers me a reward, I have the unpleasant feeling that I owe him/her something in return"). The validation of the scale by Moreau and Mageau (2012) confirmed the two-factor structure of the scale and underlined its validity and reliability. In Study 1, internal reliability (Cronbach's alpha) was $\alpha = .87$ for the perceived supervisor autonomy-supportive style and $\alpha = .92$ for the perceived controlling style.

4.1.2.2. Perceived legitimacy. Perceived legitimacy was measured using a subscale taken from the Legitimacy of Leaders Scale (Tyler & De Cremer, 2005). This subscale comprises four items that assess employees' belief that the actions of their supervisor ought to be deferred to (e.g., "It is wrong to ignore a supervisor's decisions, even if you can get away with it", "Work organizations are most effective when people follow the directives of their supervisors"). Items on the scale are measured on a 5-point scale ranging from 1 (*very true*) to 5 (*not true at all*). The questionnaire has high reliability and validity (Tyler & De Cremer, 2005). In Study 1, internal reliability (Cronbach's alpha) was $\alpha = .78$.

4.1.2.3. Work satisfaction. Satisfaction at work was measured using the emotional contagion subscale from the Focal Measures questionnaire (Netemeyer, Maxham, & Lichtenstein, 2010). The subscale comprises three items (e.g., "All in all, I am satisfied with my present job") ranked on a 5-point scale ranging from 1 (*not true at all*) to 5 (*very true*). The questionnaire has high reliability and validity (Netemeyer et al., 2010). In Study 1, the Cronbach's alpha coefficient was .89.

4.1.2.4. Affective commitment. Affective commitment to the organization was measured using the Affective Commitment subscale from the Occupational Commitment scale (Meyer, Allen, & Smith, 1993). The subscale comprises six items (e.g., "I would be very happy to spend the rest of my career with this organization.") ranked on a 5-point scale ranging from 1 (*very true*) to 5 (*not true at all*). The questionnaire has high reliability and validity (Meyer et al., 1993). Here, the Cronbach's alpha reliability was .78.

4.1.2.5. Burnout. Burnout was evaluated using the Burnout Measure Short version (BMS) developed by Malach-Pines (2005). The BMS has 10 items that assess subjective feelings and is meant to evaluate an individual's physical (e.g., "Tired"), emotional (e.g., "Depressed"), and mental exhaustion (e.g., "I've had it") levels. Items are rated on a 5-point Likert-type scale ranging from 1 (*never*) to 5 (*always*). The Cronbach's alpha coefficient for Study 1 was .91.

4.1.3. Analytical strategy

Before testing our hypotheses, we conducted a Confirmatory Factor analysis (CFA) to assess the convergent and discriminant validity of the core variables. To examine Hypotheses 1–10 on the mediating role of legitimacy in the relationship between perceived supervisor motivating styles and subordinates' outcomes, we adopted the structural equation modeling (SEM) approach in AMOS

21 (Arbuckle, 2012). Path analysis was more suitable for our study than using a series of regressions because of its parsimony. That is, SEM can simultaneously test multiple hypotheses, including indirect effects and multiple dependent variables. A further advantage is that the fit of alternative models can be quantitatively compared.

We used several different indices to test model fit. A model fit with NFI, CFI, and TLI equal to or greater than .95 and RMSEA equal to or less than .06 is indicative of an adequate fit to the data (Kline, 2016). Ideally, the chi-square statistic is expected to be nonsignificant in the case of adequate fit; generally, however, this index is no longer recommended to evaluate fit because of its hypersensitivity to sample size (Hu & Bentler, 1999). We first examined the goodness of fit indices of a full-mediation model, as it represents a more parsimonious model (James, Mulaik, & Brett, 2006). Next, we added the direct paths between the independent variables and the outcomes and estimated the fit of a partial-mediation model. We used the chi-square difference to test fit differences between the models. In the final step, we trimmed nonsignificant paths and tested again for fit differences. In all models, exogenous variables were allowed to covary. We also modeled significant covariances between the outcomes.

To test for mediation, we assessed the significance of the cross product of the coefficients for the predictor to mediator relation (the *a* path) and the mediator to outcome relation, controlling for the predictor (the *b* path). An *ab* cross product test is recognized as perhaps the best all-round available method to test mediation (Hayes, 2013). To test the significance of the mediation effects, we followed Hayes's (2013) recommendations and calculated 5000 bootstrapped samples to estimate the 95% bias-corrected and accelerated confidence interval (CI) of the indirect effects of motivating styles on the outcome variables through legitimacy. In cases where the value zero is not included in the 95% CI, its effect is considered significant at $\alpha < .05$. In all the analyses, we controlled for the significant effects of the socio-demographic variables. All exogenous variables were allowed to covary. Finally, we allowed the outcomes to correlate to account for any significant covariances.

4.2. Results and discussion

4.2.1. Preliminary analysis

Table 1 presents the correlations between the research variables. The correlations provide initial support for our mediational hypothesis. Specifically, a perceived supervisor autonomy-supportive motivating style had a positive association with perceived legitimacy, while a perceived supervisor controlling motivating style had a negative association with legitimacy. Additionally, perceived legitimacy had significant positive associations with work satisfaction and commitment and significant negative correlations with burnout.

We also examined the associations between the research variables and the socio-demographic information. Tenure and age showed a positive association with commitment, and we found gender differences for legitimacy, $t(182) = 3.27, p < .01$, whereby males ($M = 5.18, SD = .81$) reported higher perceived legitimacy than females ($M = 4.66, SD = 1.06$). We did not find significant associations of education and type of industry with the research variables. Thus, with some exceptions, we did not find significant associations between the socio-demographic variables and the research variables of interest. We did, however, control for tenure and gender to account for their covariances with commitment and legitimacy. We did not control for age to avoid multicollinearity with tenure and because the correlates of tenure were slightly stronger than the correlates of age.

4.2.2. Measurement model

We conducted a CFA of the six measures including autonomy-supportive style, controlling style, legitimacy, work satisfaction, commitment, and burnout to assess the psychometric properties of our measures. We created parcels of items for each construct. We opted for this procedure for three reasons: first, it minimizes the extent to which the indicators of each construct share variance; second, it has the ability to generate more stable parameter estimates; third, it improves the low observation-to-parameter ratio (N:q) commonly found in complex models (Jackson, 2003; Kanat-Maymon, Antebi, & Zilcha-Mano, 2016; Landis, Beal, & Tesluk, 2000). For the multidimensional constructs of autonomy-supportive and controlling motivating styles, the parcels represented the theoretical dimensions (e.g., choice, rationale, and acknowledgement as indicators of autonomy-supportive style). For the unidimensional constructs of legitimacy, work satisfaction, commitment, and burnout, we assigned items to parcels in a manner that balanced item loadings and amount (see Little, Cunningham, Shahar, & Widaman, 2002 for a detailed description of this procedure).

Each indicator in the measurement model was constrained to load on the factor it was designed to estimate. In addition, the residual terms for all indicators were uncorrelated, no equality constraints were imposed on the factor loadings, and the factor covariances were free to be estimated. The measurement model fitted the data well, with $\chi^2(120) = 240.93, p < .001, NFI = .90, CFI = .95, TLI = .92$, and $RMSEA = .07$. However, the results should be interpreted with caution because the observation-to-parameter ratio (N:q) was 2.8, whereas a ratio of 10 is usually recommended (Kline, 2016). We therefore assessed the hypotheses using SEM with the observed variables (i.e., path-analysis, N:q = 9.5).

4.2.3. Main analysis

First, we examined a model in which perceived legitimacy fully

Table 1

Descriptive statistics and correlations among the research variables (Study 1, $N = 192$).

	M	SD	1	2	3	4	5	6	7	8	9
1. Autonomy supportive style	4.85	1.10									
2. Controlling style	2.51	1.17	-.45***								
3. Legitimacy	4.85	1.02	.41***	-.17*							
4. Work satisfaction	4.58	1.53	.49***	-.24**	.36***						
5. Commitment	4.33	1.26	.29***	-.23**	.28***	.65***					
6. Burnout	2.90	1.27	-.34***	.45***	-.25**	-.57***	-.38***				
7. Gender (male)	—	—	.06	.11	.24**	.03	-.12	-.02			
8. Education (academic degree)	—	—	-.05	-.06	-.10	-.03	-.01	.11	-.11		
9. Tenure, in years	5.50	7.45	-.07	-.09	-.01	.10	.18*	-.06	-.08	-.06	
10. Age, in years	31.10	9.46	-.03	-.04	.03	.09	.17*	-.01	-.03	.10	.89***

Note:

* $p < .05$, ** $p < .01$, *** $p < .001$.

mediated the associations between perceived supervisor autonomy-supportive and controlling motivating styles and employee outcomes. Goodness-of-fit indices indicated a poor fit, with $\chi^2(10) = 75.09$, $p < .001$, $NFI = .81$, $CFI = .82$, $TLI = .83$, and $RMSEA = .18$. The next step was to examine an alternative and less parsimonious model that included the direct paths between perceived supervisor motivating styles and the outcomes. This partial mediation model had good fit indices, with $\chi^2(4) = 2.45$, $p = .652$, $NFI = .99$, $CFI = 1.00$, $TLI = 1.04$, and $RMSEA < .01$. A comparison of these models indicated that the partial mediation model fitted the data better than the full mediation model, $\Delta\chi^2(6) = 72.64$, $p < .001$.

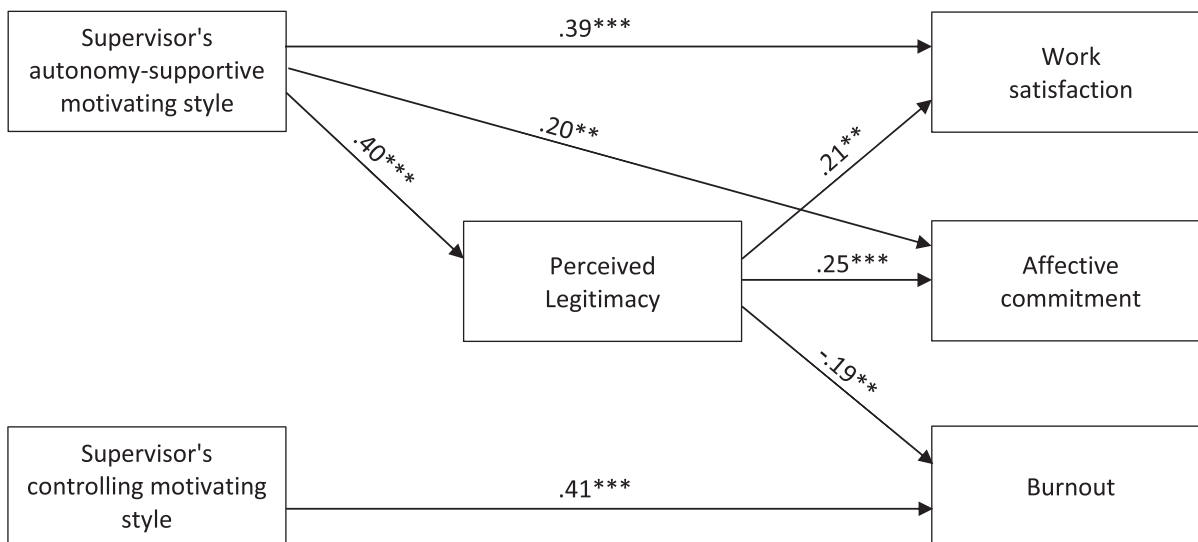
Although the partial mediation model had good fit indices, some of the relations between the variables were nonsignificant, indicating that a more parsimonious model could be found. The following four paths were nonsignificant: supervisor controlling style – legitimacy ($\beta = -.01$, $p = .875$), supervisor controlling style – commitment ($\beta = -.09$, $p = .234$), supervisor controlling style – work satisfaction ($\beta = -.01$, $t = .850$), and supervisor autonomy-supportive style – burnout ($\beta = -.10$, $p = .209$). In a trimming process, we removed nonsignificant paths from the model, one at a time, beginning with the path with the smallest t value. The trimmed model had excellent fit indices, with $\chi^2(8) = 5.98$, $p < .649$, $NFI = .99$, $CFI = 1.00$, $TLI = 1.03$, and $RMSEA < .01$. A comparison of the trimmed model with the untrimmed model indicated a nonsignificant difference, $\Delta\chi^2(4) = 3.53$, $p = .473$, which lends support to the more parsimonious model (i.e., the trimmed model). The fit indices and the path coefficients were robust to the exclusion of the demographic (i.e., gender and tenure) variables from the model. The final model is presented in Fig. 2 (see Table 3 in the

supplementary materials for a detailed analysis).

The results indicated that the perceived supervisor autonomy-supportive motivating style showed a positive association with perceived legitimacy. No such significant association was found between the perceived supervisor controlling motivating style and perceived legitimacy. These results support Hypothesis 1 but not Hypothesis 2. Furthermore, legitimacy showed a positive association with work satisfaction and commitment and a negative association with burnout. These results support Hypotheses 3, 4, and 6.

To test the significance of the indirect effects of perceived supervisor motivating styles on the outcomes via legitimacy, we used the bootstrapping approach and calculated the 95% CI for the indirect effects in 5000 resamples. The results indicated that the 95% CI for the indirect effect of perceived supervisor autonomy support on work satisfaction (point estimate = .09, 95% CI = .04, .17), commitment (point estimate = .09, 95% CI = .03, .17), and burnout (point estimate = -.08, 95% CI = -.16, -.01) through legitimacy did not have a value of zero. These results lend support to mediational Hypotheses 9a, 9b, and 9d, but not Hypotheses 10a, 10b, and 10d because the path between perceived supervisor controlling motivating style and legitimacy was not significant. Thus, this motivating style did not have an indirect effect on the outcomes through legitimacy.

We also found some direct effects. The supervisor autonomy-supportive motivating style showed a positive association with work satisfaction and commitment, and the supervisor controlling style showed a positive association with burnout. In addition, gender was significantly associated with legitimacy ($\beta = -.21$, $p < .01$) and commitment ($\beta = .16$, $p < .01$), and tenure was significantly associated with satisfaction ($\beta = .10$, $p < .05$) and



Note:

For greater clarity of visual presentation, the covariances between the exogenous variables, the covariances between the outcomes, and the controlled variables (i.e., gender and tenure) are not presented, though they were included in the analysis. Standardized parameter estimates are presented. P-values are two-tailed.

* $p < .05$, ** $p < .01$, *** $p < .001$

Fig. 2. The indirect effects of supervisor's motivating styles on outcome via legitimacy (Study 1).

Note: For greater clarity of visual presentation, the covariances between the exogenous variables, the covariances between the outcomes, and the controlled variables (i.e., gender and tenure) are not presented, though they were included in the analysis. Standardized parameter estimates are presented. P-values are two-tailed.

* $p < .05$, ** $p < .01$, *** $p < .001$.

commitment ($\beta = .17, p < .01$).

To summarize, as hypothesized, the results of Study 1 provide partial support for the mediation model. The results indicate that perceived legitimacy mediated the positive association between perceived supervisor autonomy-supportive motivating style and work satisfaction and commitment and the negative association between perceived supervisor autonomy support and burnout. Contrary to the hypothesized model, no significant association was found between perceived supervisor controlling motivating style and legitimacy. A possible explanation is that typical organizations do not exercise harsh levels of control, so that the coercion experienced by subordinates is not strong enough to undermine supervisor legitimacy. Descriptive statistics of the perceived supervisor controlling motivating style provide some support for this explanation, as the mean perceived control was 2.51 ($SD = 1.17$), and 70% of the participants' perceived control scores were less than 3 (the midpoint on a 1 to 5 scale). This may indicate that, overall, control was not harsh.

5. Study 2

Both theoretical perspectives, SDT and RMA, describe volitional motivational processes by which organizational treatment affects employee outcomes. In line with RMA, the results of Study 1 support the notion that legitimacy is a mechanism by which the autonomy-supportive motivating style is associated with employee work-related outcomes. However, the SDT asserts that task autonomous motivation is the motivational mechanism by which the autonomy-supportive motivating style associates with employee outcomes (Deci et al., 2017). As both legitimacy and autonomous motivation represent aspects of volitional motivation, it is not clear whether the statistical effects of legitimacy are unique and not attributable to task autonomous motivation.

The purpose of Study 2 was to replicate the results of Study 1 and to demonstrate that legitimacy has unique predictive validity above and beyond that of autonomous and controlled task motivations. In addition, we extended the dependent variables to include reported aspects of behavior in the form of organizational citizenship behavior, deviant behavior, and workplace conflicts.

5.1. Method

5.1.1. Participants and procedure

A convenience sample of 314 workers from various Israeli companies volunteered to participate. As in Study 1, 10 M.A. students recruited the participants through ads posted in social networks (i.e., Facebook, WhatsApp, etc.). Data were collected by using an online survey platform (Qualtrics). To reduce response distortion, the participants were informed that their responses would be treated confidentially.

The participants worked in a wide variety of industries (3% in energy, 10% in basic materials, 23% in consumer products, 10% in health, 22% in consumer services, 8% in finance, 4% in infrastructure, and 20% in technology) and occupational categories. The average age of the employees was 30.77 years (range = 21–67 years, $SD = 8.80$). Of the employees, 70% were women, 32% were married, and 70% had a college degree or higher. The average organizational tenure was 6.39 years (range = 1–40 years, $SD = 7.21$).

5.1.2. Measures

Supervisors' motivating styles (autonomy $\alpha = .87$; control $\alpha = .92$), perceived legitimacy ($\alpha = .70$), work satisfaction ($\alpha = .90$), affective commitment ($\alpha = .84$) and burnout ($\alpha = .92$) were assessed using the measures same as those in Study 1.

5.1.2.1. Organizational citizenship behavior. Organizational citizenship behavior was measured using the Organizational Citizenship Behavior subscale (Lee & Allen, 2002). The subscale comprises 8 items directed at individuals (OCB-I; e.g., "Willingly give your time to help others who have work-related problems") and 8 items directed at the organization (OCB-O; e.g., "Keep up with developments in the organization"). First, we calculated the mean scores for OCB-I and OCB-O separately. In line with the meta-analysis by LePine, Erez, and Johnson (2002), the dimensions of the OCB were highly associated (in our sample, $r = .51$) and showed no apparent differences with other research variables; therefore, we created one comprehensive OCB score that included 16 items measuring the two subscales together. The participants were asked to indicate on a 7-point scale (1 - *never*, 7 - *always*) how often they engaged in these behaviors. The Cronbach's alpha reliability was .86.

5.1.2.2. Workplace deviant behavior. Workplace deviant behavior was measured using the 19-item Workplace Deviance scale (Bennett & Robinson, 2000). The measure comprises 7 items of interpersonal deviance (deviant behaviors directly harmful to other individuals within the organization, e.g., "Said something hurtful to someone at work") and 12 items of organizational deviance (deviant behaviors directed at the organization, e.g., "Taken property from work without permission"). Respondents were asked to indicate on a 7-point Likert scale ranging from 1 (*never*) to 7 (*daily*) the extent to which they had engaged in each of the behaviors in the last year. The Cronbach's alpha coefficient was .94.

5.1.2.3. Conflict at work. Conflict at work was measured using the Interpersonal Conflict at Work Scale (ICAWS; Spector & Jex, 1998). The scale consists of four items that assess conflict with other people at work (e.g., "How often do you get into arguments with others at work"). Respondents were asked to indicate how often each item occurred at work. Items were rated on a 5-point Likert-type scale ranging from 1 (*rarely*) to 5 (*very often*). The Cronbach's alpha coefficient was .77.

5.1.2.4. Employee motivation. Employee motivation at work was measured using the Motivation at Work Scale (MAWS; Gagné et al., 2010). Participants were given 12 reasons for putting effort into their work tasks. These reasons reflect the two broad types of motivation according to the SDT. Autonomous motivation includes reasons that pertain to intrinsic motivation (e.g., "For the moments of pleasure that this job brings me") and identified regulation (e.g., "Because this job fulfils my career plans"). Controlled motivation includes reasons that pertain to introjected regulation (e.g., "Because my work is my life and I don't want to fail") and external regulation (e.g., "Because this job affords me a certain standard of living"). Cronbach's coefficients were .88 for autonomous motivation and .75 for controlled motivation.

5.1.3. Analytical strategy

Before testing our hypotheses, we conducted a CFA to assess the convergent and discriminant validity of the core variables. To examine the research hypotheses, we used the SEM approach with observed variables in AMOS 21 (Arbuckle, 2012). Fit indices with NFI, CFI, and TLI equal to or greater than .95 and RMSEA equal to or less than .06 are indicative of an adequate fit to the data (Kline, 2016). We first examined the full-mediation model, as it represents a more parsimonious model. Next, we added the direct paths between the independent variables and the outcomes and estimated the fit of a partial-mediation model. We used the chi-square difference to test for fit differences between the models. In the following step, we trimmed nonsignificant paths and tested again

for fit differences. In the final step, we compared the hypothesized legitimacy-as-a-mediator model to an alternative model that did not include legitimacy. All exogenous variables were allowed to covary. We allowed the mediators to correlate to account for their covariances and to let them compete for explained variance in the outcomes. We also modeled significant covariances between the outcomes. To test for mediation, we calculated 5000 bootstrapped samples to estimate the 95% bias-corrected and accelerated confidence interval (CI) of the indirect effects. In all the analyses, we controlled for the significant effects of the socio-demographic variables.

5.2. Results

5.2.1. Preliminary results

Table 2 presents the correlations between the research variables. The correlations indicate that the perceived autonomy supportive-motivating style showed a positive association with perceived legitimacy and the perceived supervisor controlling motivating style showed a negative association with perceived legitimacy. Perceived legitimacy had significant positive associations with job satisfaction, commitment, and OCB and negative associations with burnout, deviant behavior, and conflicts at work.

Both autonomous and controlled motivations were associated with perceived legitimacy. Autonomous motivation was associated with autonomy support and all the outcome variables in the expected direction. Controlled motivation showed a positive association with supervisor controlling style and, unexpectedly, to work satisfaction, commitment, and OCB. Our finding of the correlations of autonomous and controlled motivations with motivating styles, legitimacy, and outcomes justified accounting for their covariances in estimating the unique statistical effects of legitimacy.

We also found significant associations between socio-demographic variables and the variables of interest. Tenure and age showed a positive association with legitimacy, autonomous motivation, work satisfaction, commitment, and OCB and a negative association with burnout and deviant behavior. Gender differences were observed for deviant behavior, $t(312) = 2.20, p < .05$, and workplace conflicts, $t(312) = 2.12, p < .05$. Males reported more deviant behaviors ($M = 1.80, SD = .81$) and workplace conflicts ($M = 2.19, SD = 1.08$) than females (deviant behaviors: $M = 1.57, SD = .68$; workplace conflicts: $M = 1.87, SD = 1.05$). Type of industry and education were not associated with the focal variables. Consequently, we controlled for the significant effects of tenure and gender in the path model. We did not control age to avoid

multicollinearity with tenure.

5.2.2. Measurement model

Our initial measurement model specified 11 factors (i.e., 2 independent factors, 3 mediators, and 6 outcomes). As in Study 1, we created parcels. For the multidimensional constructs of supervisor autonomy-supportive motivating style, supervisor controlling motivating style, autonomous motivation, controlled motivation, OCB, and deviant behavior, the parcels represented the theoretical dimensions (e.g., OCB-I and OCB-O as indicators of the OCB construct). For the unidimensional constructs of legitimacy, work satisfaction, commitment, burnout, and workplace conflicts, we assigned items to parcels in a manner that balanced item loadings and amount (Little et al., 2002). All parcels were specified to their corresponding latent variable, all residual terms were uncorrelated, no equality constraints were imposed on the factor loadings, and the factor covariances were free to be estimated. The measurement model fitted the data well, with $\chi^2(295) = 664.34, p < .001, NFI = .88, CFI = .93, TLI = .90, \text{ and } RMSEA = .06$. Owing to model complexity and small sample size, we tested the hypotheses using observed variables (i.e., path-analysis).

5.2.3. Main analysis

We first examined a model in which legitimacy, autonomous motivation, and controlled motivation fully mediated the associations between perceived supervisor autonomy-supportive and controlling motivating styles and employee outcomes. Goodness-of-fit indices indicated a close fit, with $\chi^2(29) = 120.91, p < .001, NFI = .91, CFI = .93, TLI = .78, \text{ and } RMSEA = .10$. The next step was to examine an alternative and less parsimonious model that included the direct paths between perceived supervisor motivating styles and the outcomes. The partial mediation model had good fit indices, with $\chi^2(17) = 17.99, p = .389, NFI = .99, CFI = 1.00, TLI = 1.00, \text{ and } RMSEA = .01$. A comparison of these models indicated that the partial mediation model fitted the data better than the full mediation model, $\Delta\chi^2(12) = 102.92, p < .001$. Finally, we compared the partial mediation model to an alternative model which did not include legitimacy. Although the fit indices of this alternative model were adequate, $\chi^2(25) = 40.08, p = .029, NFI = .97, CFI = .99, TLI = .96, \text{ and } RMSEA = .04$, it did not fit the data as well as the partial mediation model that included legitimacy as a mediator, $\Delta\chi^2(8) = 22.81, p < .01$.

The partial mediation model had good fit indices, but some of the relations between the variables were nonsignificant, indicating that a more parsimonious model could be found. The following ten

Table 2 Descriptive statistics and correlations among the research variables (Study 2, N = 314).

	M	SD	1	2	3	4	5	6	7	8	9	10	11	12	13	14
1. Autonomy supportive style	4.99	1.13														
2. Controlling style	2.39	1.12	-.53***													
3. Legitimacy	4.87	0.93	.29***	-.14*												
4. Autonomous motivation	4.48	1.46	.38***	-.17**	.28***											
5. Controlled motivation	3.90	1.17	-.03	.16**	.17**	.27***										
6. Work satisfaction	4.71	1.57	.51***	-.31***	.34***	.64***	.21***									
7. Commitment	4.35	1.41	.43***	-.28***	.31***	.65***	.12*	.70***								
8. OCB	4.86	0.94	.47***	-.21***	.49***	.53***	.14*	.56***	.58***							
9. Burnout	2.82	1.14	-.39***	.36***	-.33***	-.47***	-.07	-.59***	-.48***	-.40***						
10. Deviance behavior	1.62	0.71	-.19**	.22***	-.32***	-.24***	.05	-.29***	-.26***	-.29***	.35***					
11. Conflicts at work	1.95	1.04	-.27***	.37***	-.26***	-.19**	.07	-.28***	-.21***	-.34***	.38***	.46***				
12. Tenure, in years	5.50	7.45	-.04	.01	.17**	.18**	.07	.22***	.33***	.12*	-.13*	-.14*	.04			
13. Gender (male)	–	–	.11	.10	-.01	.01	.03	-.01	.01	.04	.01	.14*	.13*	-.04		
14. Education (academic degree)	–	–	.06	.02	-.01	.10	-.05	-.06	-.01	.05	-.06	-.01	-.05	-.10	.02	
15. Age, in years	30.77	8.80	.03	-.02	.18*	.17**	.05	.17**	.29***	.12*	-.12*	-.14*	.03	.80***	.13*	-.04

Note: *p < .05, **p < .01, ***p < .001.

paths were nonsignificant: supervisor controlling style – legitimacy ($\beta = .01, p = .895$), supervisor controlling style – autonomous motivation ($\beta = .05, p = .374$), supervisor autonomy-supportive style – controlled motivation ($\beta = .07, p = .278$), supervisor controlling style – OCB ($\beta = .03, p = .552$), supervisor autonomy-supportive style – deviant behavior ($\beta = .02, p = .820$), supervisor autonomy-supportive style – burnout ($\beta = -.08, p = .162$), supervisor autonomy-supportive style – conflicts ($\beta = -.04, p = .567$), controlled motivation – commitment ($\beta = -.04, p = .358$), controlled motivation – OCB ($\beta = .01, p = .941$), and controlled motivation – burnout ($\beta = .01, p = .821$).

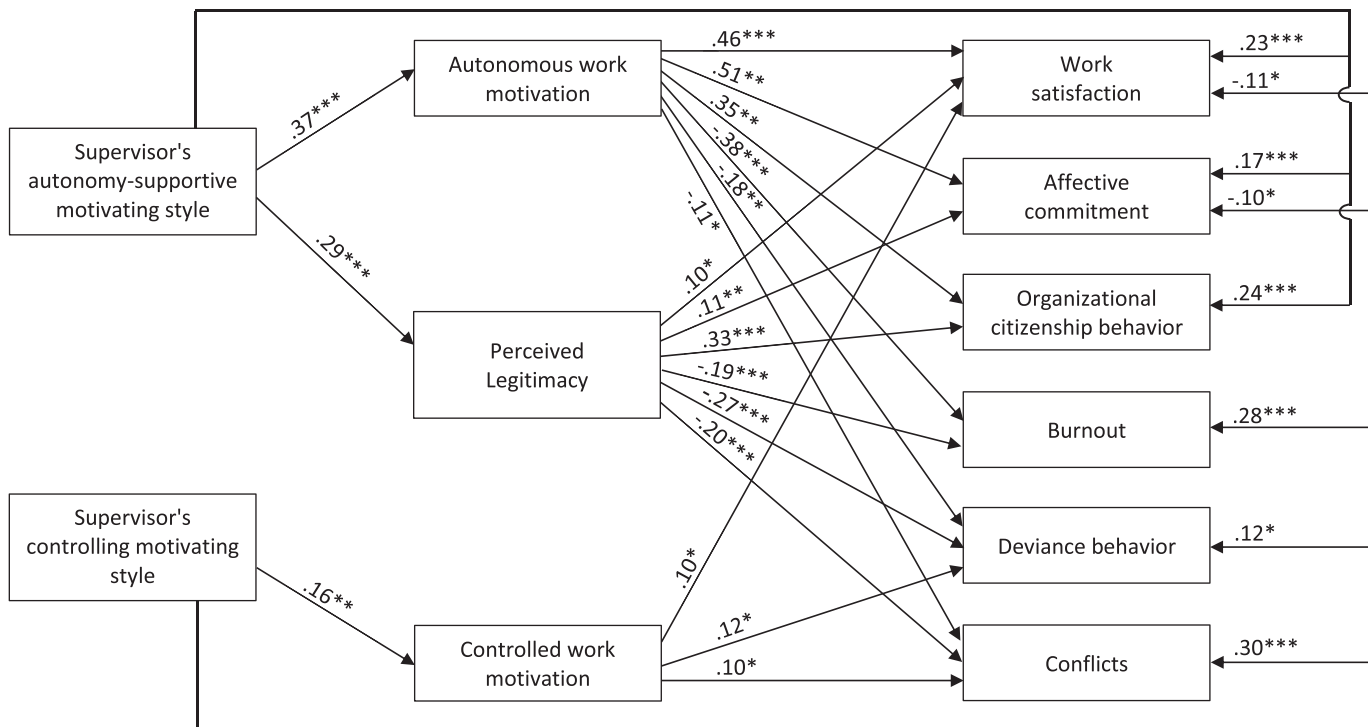
In a trimming process, we removed nonsignificant paths from the model, one at a time, beginning with the path with the smallest t value. The trimmed model had excellent fit indices, with $\chi^2(27) = 23.28, p = .670, NFI = .98, CFI = 1.00, TLI = 1.01$, and $RMSEA < .01$. A comparison of the trimmed model with the untrimmed model indicated a nonsignificant difference, $\Delta\chi^2(10) = 5.29, p = .870$, thus supporting the more parsimonious model (i.e., the trimmed model). The fit indices and the path coefficients were robust to the exclusion of the demographic variables (i.e., gender and tenure) from the model. This final model is presented in Fig. 3 (see Table 4 in the supplementary materials for a detailed analysis).

In support of Hypothesis 1, supervisor autonomy-supportive

motivating style showed a positive association with legitimacy, but we found no significant association between supervisor controlling motivating style and legitimacy. Therefore, Hypothesis 2 was not supported. Legitimacy showed a positive association with work satisfaction, commitment, and OCB and a negative association with burnout, deviant behavior, and workplace conflicts, thus supporting Hypotheses 3, 4, 5, 6, 7, and 8.

The 95% CI of the indirect effects indicated that legitimacy significantly mediated the association between supervisor autonomy-supportive motivation style and work satisfaction (point estimate = .03, 95% CI = .01, .06), commitment (point estimate = .03, 95% CI = .01, .06), OCB (point estimate = .10, 95% CI = .06, .14), burnout (point estimate = -.06, 95% CI = -.09, -.02), deviant behavior (point estimate = -.08, 95% CI = -.13, -.05), and workplace conflicts (point estimate = -.07, 95% CI = -.11, -.03). These results lend support to our mediational Hypotheses 9a–9f. However, the results do not confirm that perceived supervisor controlling motivating styles had an indirect effect on the outcomes through legitimacy (Hypotheses 10a to 10f) because the path between supervisor controlling styles and legitimacy was not significant.

In line with Hypothesis 11, supervisor autonomy-supportive motivating style showed a positive association with autonomous motivation. Moreover, in line with Hypotheses 12a to 12f,



Note:

For greater clarity of visual presentation, the covariances between the exogenous variables, the covariances between the mediators, the covariances between the outcomes, and the controlled variables (i.e., gender and tenure) are not presented, though they were included in the analysis. Standardized parameter estimates are presented. P-values are two-tailed.

* $p < .05$, ** $p < .01$, *** $p < .001$

Fig. 3. The indirect effects of supervisor's motivating styles on employees' outcome via legitimacy (Study 2).

Note: For greater clarity of visual presentation, the covariances between the exogenous variables, the covariances between the mediators, the covariances between the outcomes, and the controlled variables (i.e., gender and tenure) are not presented, though they were included in the analysis. Standardized parameter estimates are presented. P-values are two-tailed.

* $p < .05$, ** $p < .01$, *** $p < .001$.

autonomous motivation showed a positive association with work satisfaction, commitment, and OCB and a negative association with burnout, deviant behavior, and workplace conflicts. The 95% CI of the indirect effects indicated that autonomous motivation mediated the effect of perceived supervisor autonomy-supportive motivating style on work satisfaction (point estimate = .17, 95% CI = .12, .23), commitment (point estimate = .19, 95% CI = .14, .26), OCB (point estimate = .13, 95% CI = .09, .19), burnout (point estimate = -.14, 95% CI = -.20, -.09), deviant behavior (point estimate = -.10, 95% CI = -.16, -.05), and workplace conflicts (point estimate = -.04, 95% CI = -.08, -.01).

The supervisor controlling motivating style showed a positive association with controlled motivation, confirming Hypothesis 14. Controlled motivation showed a positive association with deviant behavior and workplace conflicts, supporting Hypotheses 15e and 15f. Controlled motivation was not significantly associated with commitment, OCB, and burnout; hence, Hypotheses 15b, 15c, and 15d were not confirmed. Surprisingly, controlled motivation showed a positive association with work satisfaction; hence, Hypothesis 15a was not confirmed. Tests of indirect effect indicated that controlled motivation mediated the effect of the perceived supervisor controlling motivating style on work satisfaction (point estimate = .02, 95% CI = .01, .04), deviant behavior (point estimate = .03, 95% CI = .01, .04), and workplace conflicts (point estimate = .02, 95% CI = .01, .04). This lends support to Hypotheses 16a, 16e, and 16f but does not confirm Hypotheses 16b, 16c, and 16d.

Finally, we observed some direct paths. Perceived supervisor autonomy-supportive motivating style showed a positive association with work satisfaction, commitment, and OCB. Perceived supervisor controlling motivating style showed a positive association with burnout, deviant behaviors, and workplace conflicts and a negative association with work satisfaction and commitment.

6. Discussion

The two studies reported here aimed to account for employee work-related outcomes by integrating the notion of motivating styles (autonomy support and control) formulated by SDT (Deci & Ryan, 2000) with legitimacy as conceptualized by the Relational Model of Authority (Tyler & Lind, 1992; Tyler, 1997). We hypothesized that perceived supervisor motivating styles would be associated with employees' work outcomes through perceived legitimacy.

Across the two studies, autonomy-supportive motivating style showed a positive association with perceived legitimacy. By contrast, and unexpectedly, the controlling motivating style was not associated with legitimacy. In turn, legitimacy showed a positive association with desired work outcomes such as work satisfaction, affective commitment, and organizational citizenship behavior and a negative association with undesired outcomes such as burnout, deviant behavior, and workplace conflicts. Notably, in Study 2, legitimacy played a unique mediation role that cannot be attributed to either autonomous or controlled motivation.

In line with SDT, the results of Study 2 showed that autonomous motivation mediated the association between the supervisor autonomy-supportive motivating style and work satisfaction, commitment, OCB, burnout, deviant behavior, and workplace conflicts. Controlled motivation mediated the association between the supervisor controlling motivating style and deviant behavior, workplace conflicts, and work satisfaction. Notably, and unexpectedly, controlled motivation had a weak positive significant association with job satisfaction. It might be that employees, who are oriented to invest time and effort in their jobs because of the rewards they are expecting to get, extract some satisfaction out of their jobs when they are rewarded.

6.1. Implications

A number of theoretical and practical implications stem from these findings. First, the literature on organizational justice has repeatedly shown that procedural justice is an important factor in the emergence of legitimacy (Colquitt, Conlon, Wesson, Porter, & Ng, 2001). However, managers are often required to manage employees who deal with different tasks with varying levels of complexity and skill. In these cases, fair instrumental procedures for resource allocation, such as employee evaluations, promotions, and so forth, may be difficult to establish and, consequently, legitimacy may be undermined (Delfgaauw & Souverijn, 2016; Dulebohn & Ferris, 1999; Fulk, Brief, & Barr, 1985).

The work described here extends this instrumental procedural justice approach and suggests that focusing on the interpersonal aspects of management may be an additional path to legitimacy. Consistent with the RMA, our findings suggest that adopting a supportive interpersonal relationship strategy enables supervisors to elicit voluntary consent. The findings also resonate with the literature on interactional justice (i.e., followers are treated with dignity and respect) and informational justice (i.e., fairness of explanations provided) (Bies & Moag, 1986; Greenberg, 1990). These forms of justice have some resemblance to dimensions of autonomy support. For instance, provision of a rationale resembles informational justice and acknowledgement of consideration resonates with interactional justice. However, the strong emphasis on fostering choice as a means of autonomy support is less conspicuous in the organizational justice literature. Integrating the theoretical frameworks of organizational justice and SDT may be an interesting avenue for future research.

Second, and surprisingly, we found no association between the controlling motivating style and legitimacy. Interestingly, when using employee reports, Tyler and Blader (2005) also found that using a controlled approach was unrelated to deference to organizational policy. Arguably, in work organizations, employees may take it for granted that the company and its leaders have the right to regulate their behavior and attitudes so that mild control does not undermine supervisors' perceived legitimacy. For instance, many firms use such forms of control as incentives, sanctions, and monitoring (e.g., cameras, recording phone calls, time clocks, drug testing, and performance tracking devices). Acknowledging that a mild form of control does not undermine a supervisor's legitimacy may also imply that, to some extent, supervisors can pursue organizational goals through the use of control practices without jeopardizing their legitimacy. Further research is needed to support this notion.

Beyond the potential separate effects of SDT and RMA, the inclusion of legitimacy as a mechanism by which autonomy support is associated with employee outcomes enriches SDT by shedding light on an additional process that can explain the effectiveness of autonomy support. Traditionally, the impact of autonomy support was accounted for by its indirect effect through autonomous motivation. Our results suggest that legitimacy is another way through which autonomy support is associated with employee outcomes. Although both autonomous motivation and legitimacy can be considered forms of internalization, autonomous motivation is mostly oriented toward a task or activity at hand, whereas legitimacy is focused on the internalization of the authority's power. Distinguishing between these two internalization contents may have practical implications for supervisors whose employees perform simple and routine tasks. In such tasks, autonomy support may have limited impact on performance through autonomous motivation because the tasks themselves are neither interesting nor challenging (Kanat-Maymon and Reizer, 2017). In such tasks, the path through legitimacy may have a more marked impact on

performance because it captures another aspect of employee adherence that is not related to the task itself. Future research can explore this line of reasoning.

Third, the supervisor autonomy-supportive motivating style is an interpersonal style and, unlike personality or demographic characteristics, it is amenable to intervention (Assor et al., 2018). Throughout the chain of command, individuals in leadership positions can be taught how to refine their interpersonal skills and actualize an autonomy-supportive style. Research has identified four key features of autonomy support: providing rationales for expectations, nurturing workers' inner motivational resources, acknowledging employees' perspectives (including expressions of negative affect), and using non-controlling language. Hardré and Reeve (2009) found that managers trained in these four autonomy-supportive components showed more autonomy support of their employees. This may have practical implications for those in charge of management training and development.

6.2. Limitations and future directions

Several limitations should be noted. A cross-sectional survey to assess whether perceived supervisor motivating styles are associated with employee well-being and functioning and whether this association is mediated by perceived legitimacy cannot be used to infer causality. Future longitudinal studies could shed light on the directionality of the effects.

In addition, self-reports were collected from a single source; as a consequence, the findings might be subject to common-method variance. Although some statisticians have argued that common-method variance in organizational research may not be severe (Crampton & Wagner, 1994), future research should obtain information from collateral sources, such as ratings by supervisors and subordinates, and use multiple methods such as objective assessments of performance. Finally, the employees volunteered to participate in our studies, making the findings susceptible to selection bias.

7. Conclusion

Both studies in this article tested and found support for a model in which perceived supervisor legitimacy mediates the association between the supervisor autonomy-supportive motivating style and important employee work-related outcomes. By integrating SDT with RMA, our work highlights that deference to authority is a unique motivational force that may impact important organizational outcomes above and beyond types of task motivation. Finally, it shows how managerial practices (i.e., autonomy support) have the potential to enhance deference.

Declaration of conflicting interests

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Appendix A. Supplementary data

Supplementary data related to this article can be found at <https://doi.org/10.1016/j.emj.2018.02.004>.

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